

REMARKS

Applicants have carefully reviewed and considered the Office Action.

Currently, claims 1, 3-9, 11, 12 and 15-22 are pending in the present application, and claims 1 and 15 are independent. Claims 15-22 have been withdrawn.

Claims 1, 3 and 5-7 have been amended. Specifically, claim 1 has been amended to include the subject matter of claim 2 and the limitation of “vertically”, which is found in at least previous claim 1 and paragraph [018] of original specification, and thus claim 2 has been canceled. Also, dependencies of claims 3 and 5-7 have been altered. Therefore, no new matter has been added by these amendments.

Reconsideration and withdrawal of the rejection, as amended, are respectfully requested in view of the following remarks.

Claim Rejections under 35 U.S.C. §112

Claims 1-9 and 11-12 are rejected 35 U.S.C. § 112, first paragraph, as failing to comply with the written description in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. Also, claims 1-9 and 11-12 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These rejections are respectfully traversed.

While not conceding to the Examiner's rejections, but to merely advance prosecution, claim 1 has been amended as explained above. Thus, by way of the present submission, these rejections are moot.

Reconsideration and withdrawal of the rejection are respectfully requested.

Claim Rejection under 35 U.S.C. § 103(a)

Claims 1-9 and 11-12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Sato et al. (US 6,331,384, hereinafter Sato '384) and Fairbairn et al (US 6,176,667, hereinafter Fairbairn '667). Applicants traverse the rejection for the following reasons.

While not conceding to the Examiner's rejections, but to merely advance prosecution, claim 1 has been amended as explained above.

Claim 1 includes a combination of elements and is directed to a device usable for forming an alignment layer of a display apparatus, the device comprising: a printing part to print an alignment layer on a substrate; a drying part positioned vertically above the printing part to dry the alignment layer printed on the substrate; a transferring part including a transfer robot to transfer the substrate from the printing part to the drying part by elevating the substrate; and at least one inkjet head to spray an alignment material and thereby print the alignment layer onto the substrate and being positioned vertically between the printing part and the drying part (emphasis added).

These features are supported at least by the non-limiting example shown in Figures 4-6 and the corresponding description in the present specification. For instance, Figure 5 illustrates the drying part 40 performing a drying process is positioned vertically above the printing part 30

performing a printing process of the alignment layer on the substrate 10. At least one inkjet head 34 sprays the alignment material and thereby print the alignment layer onto the substrate 10 and being positioned between the printing part 30 and the drying part 40.

However, neither of Satoi '384 and Fairbairn '667 disclose or teach the claimed features. Particularly, Satoi '384 and Fairbairn '667 fail to teach or describe the claimed features that a drying part positioned vertically above the printing part to dry the alignment layer printed on the substrate and at least one inkjet head to spray an alignment material and thereby print the alignment layer onto the substrate and being positioned vertically between the printing part and the drying part (emphasis added).

In Satoi '384, a coloring unit 205 and a drying apparatus 208 are positioned horizontally in line as shown in Fig. 12 and the related description.

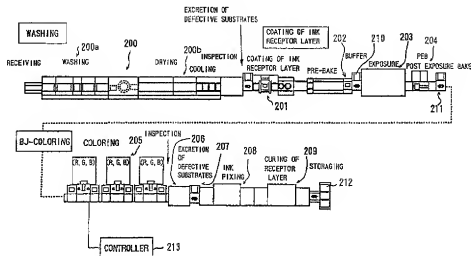
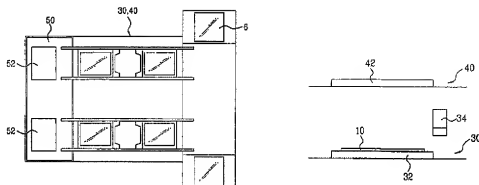


Fig. 12 of Satoi '384

However, the drying part 40 of the claimed invention is positioned vertically over the printing part 30 as shown Figs. 4 and 5 and the related description (emphasis added).



Figs. 4 and 5 of the present application

Therefore, it is possible to decrease the height of the device for printing the alignment layer of the LCD device according to the present invention. Thus, immediately upon completing the printing process, the drying process is performed in the device for printing the alignment layer of the LCD device according to the present invention. See, for example, paragraph [0051] of original specification.

Even though Sato '384 discloses that the units can be individual apparatus, Sato '384 does not disclose stacked units. With regard to this, Fairbairn '667 discloses at least stacked two chambers. However, Fairbairn '667 fails to disclose or teach what the stacked chambers are. That is, Fairbairn '667 fails to disclose or teach the printing part and the drying part as well as relationship between the printing part and the drying part.

Also, an inkjet head 55 of Sato '384 is positioned over the substrate 1. However, Sato '384 remains silent as to show the inkjet head 55 is positioned under the drying part 208. Further, Fairbairn '667 fails to disclose or teach an inkjet head.

However, the inkjet head of the present invention is positioned vertically between the printing part and the drying part. Specifically, the inkjet head 34 of the present application is

positioned under the drying part 30. Therefore, printing and drying are performed in one room, it is possible to save process time and increase product rate.

Furthermore, Applicants respectfully submit that the invention in question must be judged with its constituent parts considered as an organic whole, and the constituent parts will likely not be considered individually as inventions per se.

Accordingly, the claimed invention is patentably distinct from the applied references, whether taken singly or in combination as discussed above.

As the MPEP directs, all the claim limitations must be taught or suggested by the prior art to establish a *prima facie* case of obviousness. See MPEP § 2143.03. In view of the fact that the cited references fail to teach or fairly suggest the claimed features, a *prima facie* case of obviousness cannot be said to exist.

In light of the above remarks, since the amended independent claim 1 of the present application are believed to overcome the 35 USC § 103(a) rejection, claims 3-9 and 11-12, which are dependent on the base claim 1 directly or indirectly, are also patentable for the reasons discussed above with respect to base claim 1, as well as on their own merits.

Therefore, the Examiner is respectfully requested to withdraw this rejection.

Conclusion

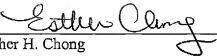
In view of the above amendment, Applicants believe the pending application is in condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Esther H. Chong, Reg. No. 40, 953 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated:

Respectfully submitted,

By 

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